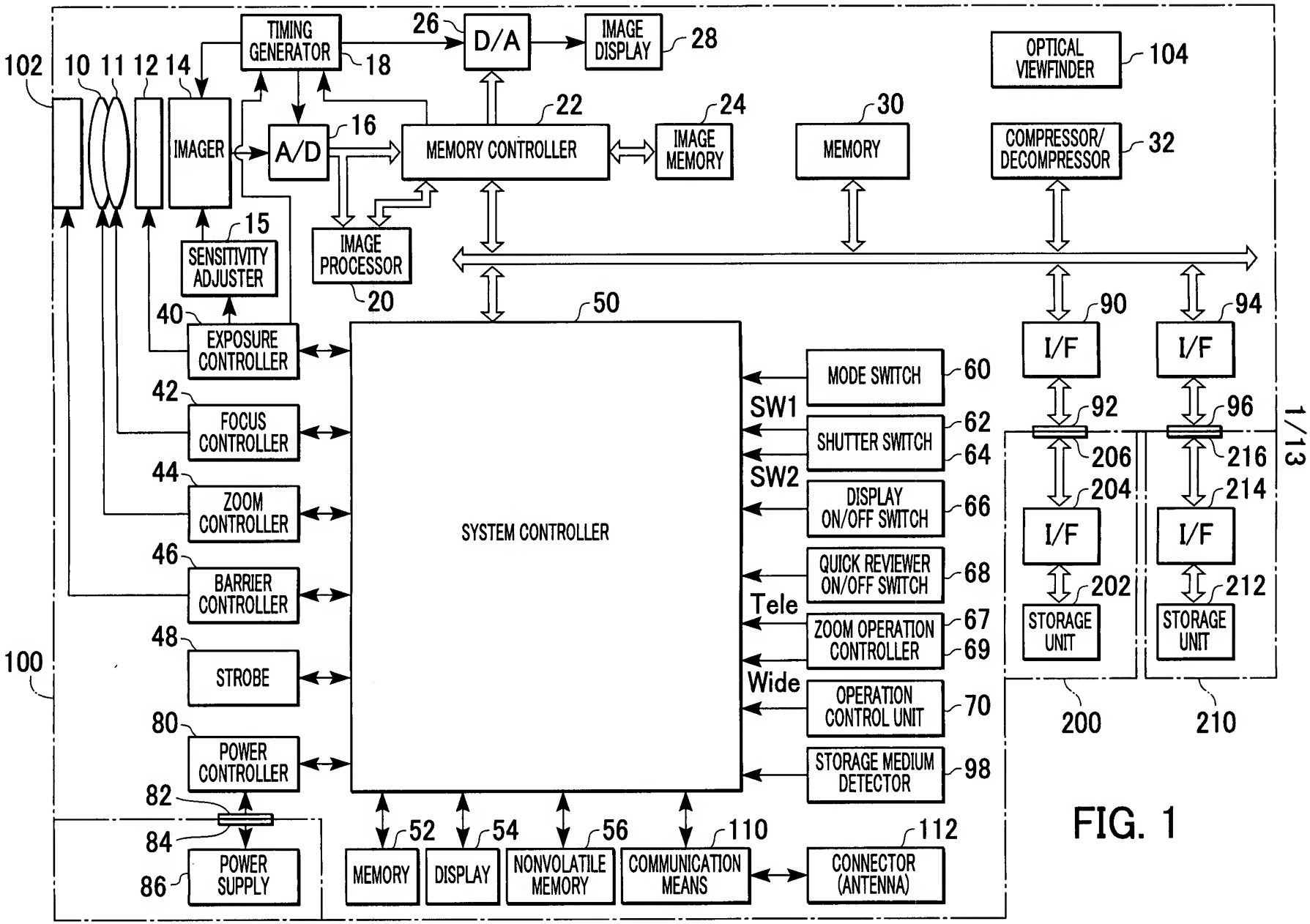

TIMING GENERATOR
18
26
D/A
IMAGE DISPLAY
28
OPTICAL VIEWFINDER
104
102
10
11
12
14
IMAGER
A/D
16
MEMORY CONTROLLER
22
IMAGE MEMORY
24
MEMORY
30
COMPRESSOR/ DECOMPRESSOR
32
15
SENSITIVITY ADJUSTER
IMAGE PROCESSOR
20
50
90
94
I/F
I/F
40
EXPOSURE CONTROLLER
42
FOCUS CONTROLLER
44
ZOOM CONTROLLER
46
BARRIER CONTROLLER
48
STROBE
80
POWER CONTROLLER
82
84
86
POWER SUPPLY
SYSTEM CONTROLLER
MODE SWITCH
60
SW1
SHUTTER SWITCH
62
64
SW2
DISPLAY ON/OFF SWITCH
66
QUICK REVIEWER ON/OFF SWITCH
68
Tele
ZOOM OPERATION CONTROLLER
67
69
Wide
OPERATION CONTROL UNIT
70
STORAGE MEDIUM DETECTOR
98
92
96
206
216
204
214
I/F
I/F
202
212
STORAGE UNIT
STORAGE UNIT
200
210
1/13
100
52
54
56
110
112
MEMORY
DISPLAY
NONVOLATILE MEMORY
COMMUNICATION MEANS
CONNECTOR (ANTENNA)

FIG. 1

FIG. 2

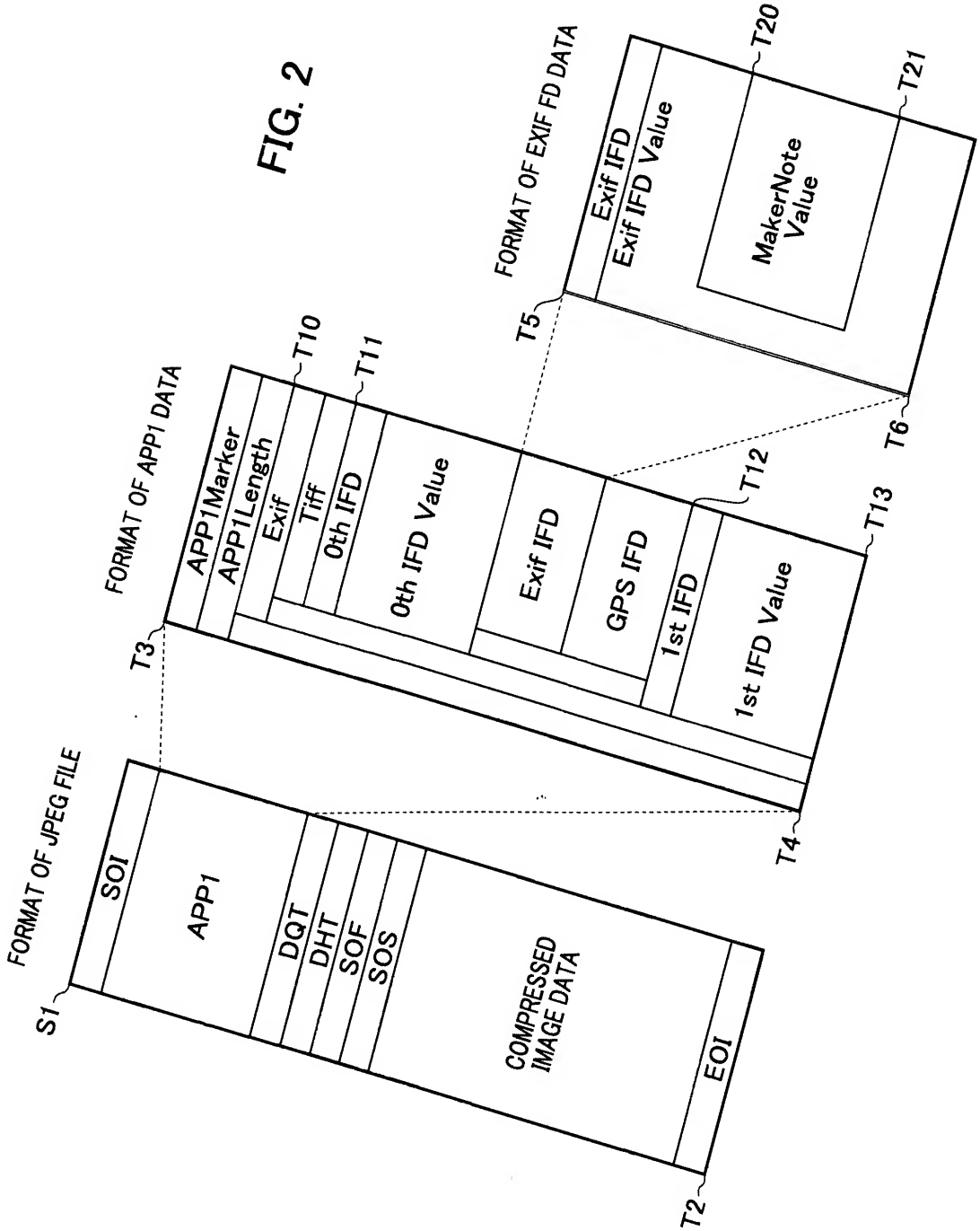

FORMAT OF JPEG FILE
S1
SOI
APP1
DQT
DHT
SOF
SOS
COMPRESSED IMAGE DATA
EOI
T2
T3
T4
FORMAT OF APP1 DATA
APP1Marker
APP1Length
Exif
Tiff
0th IFD
0th IFD Value
Exif IFD
GPS IFD
1st IFD
1st IFD Value
T10
T11
T12
T13
T5
T6
FORMAT OF EXIF FD DATA
Exif IFD
Exif IFD Value
MakerNote Value
T20
T21

FIG. 3

	Marker Name	Marker Code	DESCRIPTION
SOI	Start of Image	FFD8.H	START OF COMPRESSED DATA
APP1	Application Segment 1	FFE1.H	ADDITIONAL INFORMATION OF EXIF
APP2	Application Segment 2	FFE2.H	EXTENDED DATA OF EXIF
DQT	Define Quantization Table	FFDB.H	QUANTIZATION TABLE
DHT	Define Huffman Table	FFC4.H	HUFFMAN TABLE
DRI	Define Restart Interval	FFDD.H	RESTART INTERVAL
SOF	Start of Frame	FFC0.H	FRAME PARAMETERS
SOS	Start of Scan	FFDA.H	COMPONENT PARAMETERS
EOI	End of Image	FFD9.H	END OF COMPRESSED DATA

FIG. 4

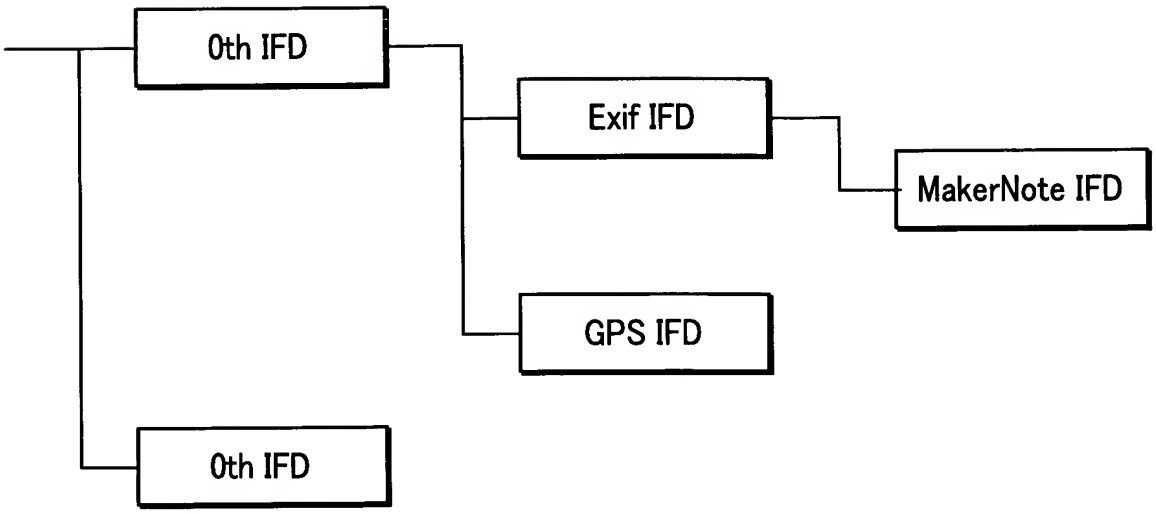


FIG. 5

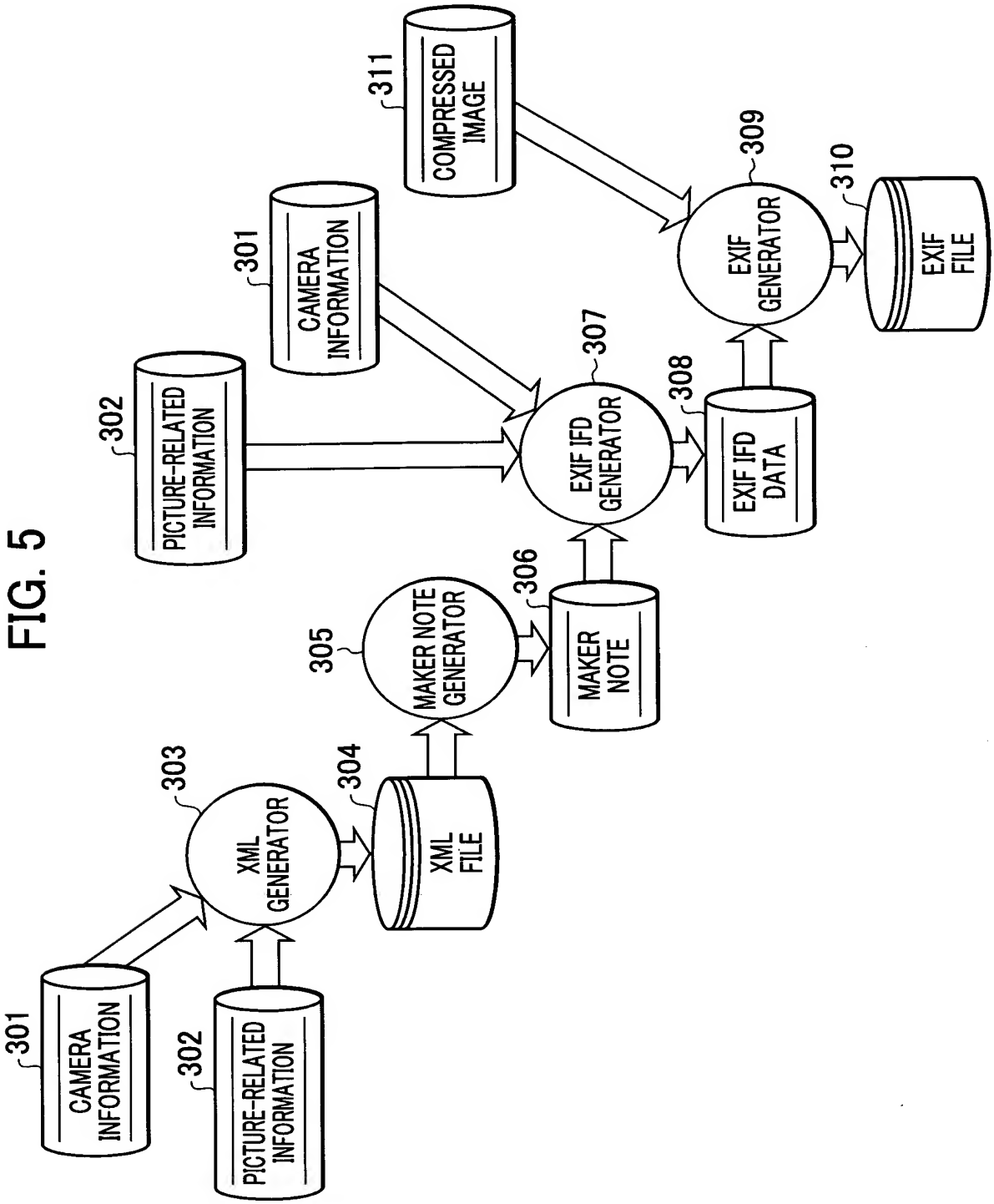

301
CAMERA INFORMATION
302
PICTURE-RELATED INFORMATION
303
XML GENERATOR
304
XML FILE
305
MAKER NOTE GENERATOR
306
MAKER NOTE
307
EXIF IFD GENERATOR
308
EXIF IFD DATA
309
EXIF GENERATOR
310
EXIF FILE
311
COMPRESSED IMAGE

FIG. 6

```
<?xml version="1.0" encoding="Shift_JIS"?>
<MakerNote>
        <CANON Version="0.00.00">
                <UserSetting>
                        <Macro>On</Macro>
                        <SelfTimer>On</SelfTimer>
                        <CompQuality>Fine</CompQuality>
                        <EF>Auto</EF>
                        <ReleaseMethod>Single</ReleaseMethod>
                        <ShootingNumber>0</ShootingNumber>
                        <ReleaseTiming>FocusPriority</ReleaseTiming>
                        <ImageSize>Large</ImageSize>
                        <ImageMode>Auto</ImageMode>
                        <Contrast>default</Contrast>
                        <ColorGain>default</ColorGain>
                        <Sharpness>default</Sharpness>
                        <Sensitivity>default</Sensitivity>
                        <MLWeiMode>Center</MLWeiMode>
                </UserSetting>
                <OpticsInfo>
                        <LensType>Zoom</LensType>
                        <FocalLength>204/32</FocaalLength>
                        <XSizeCCD>252/1024</XSizeCCD>
                        <YSizeCCD>189/1024</YSizeCCD>
                </OpticsInfo>
                <FlashInfo>
                        <DayLightValue>94</DayLightValue>
                        <FlashLightValue>71</FlashLightValue>
                        <FlashKind>380EX</FlashKind>
                        <FlashTime>1000</FlashTime>
                </FlashInfo>
                <OwnerName>
                        <![CDATA[NULL]]>
                </OwnerName>
        </CANON>
</MakerNote>
```

FIG. 7

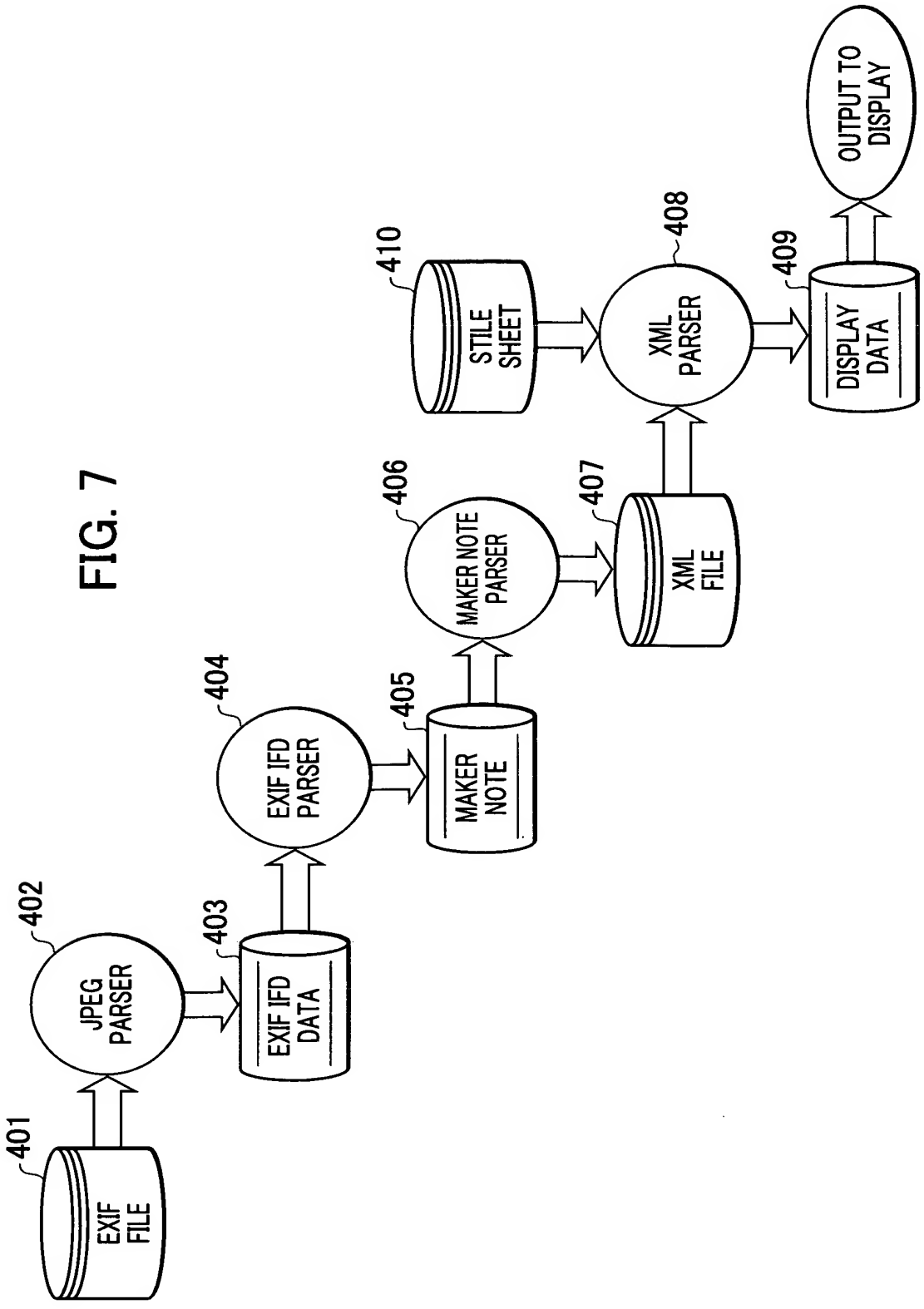

401
EXIF FILE
402
JPEG PARSER
403
EXIF IFD DATA
404
EXIF IFD PARSER
405
MAKER NOTE
406
MAKER NOTE PARSER
407
XML FILE
408
XML PARSER
409
DISPLAY DATA
410
STILE SHEET
OUTPUT TO DISPLAY

FIG. 8

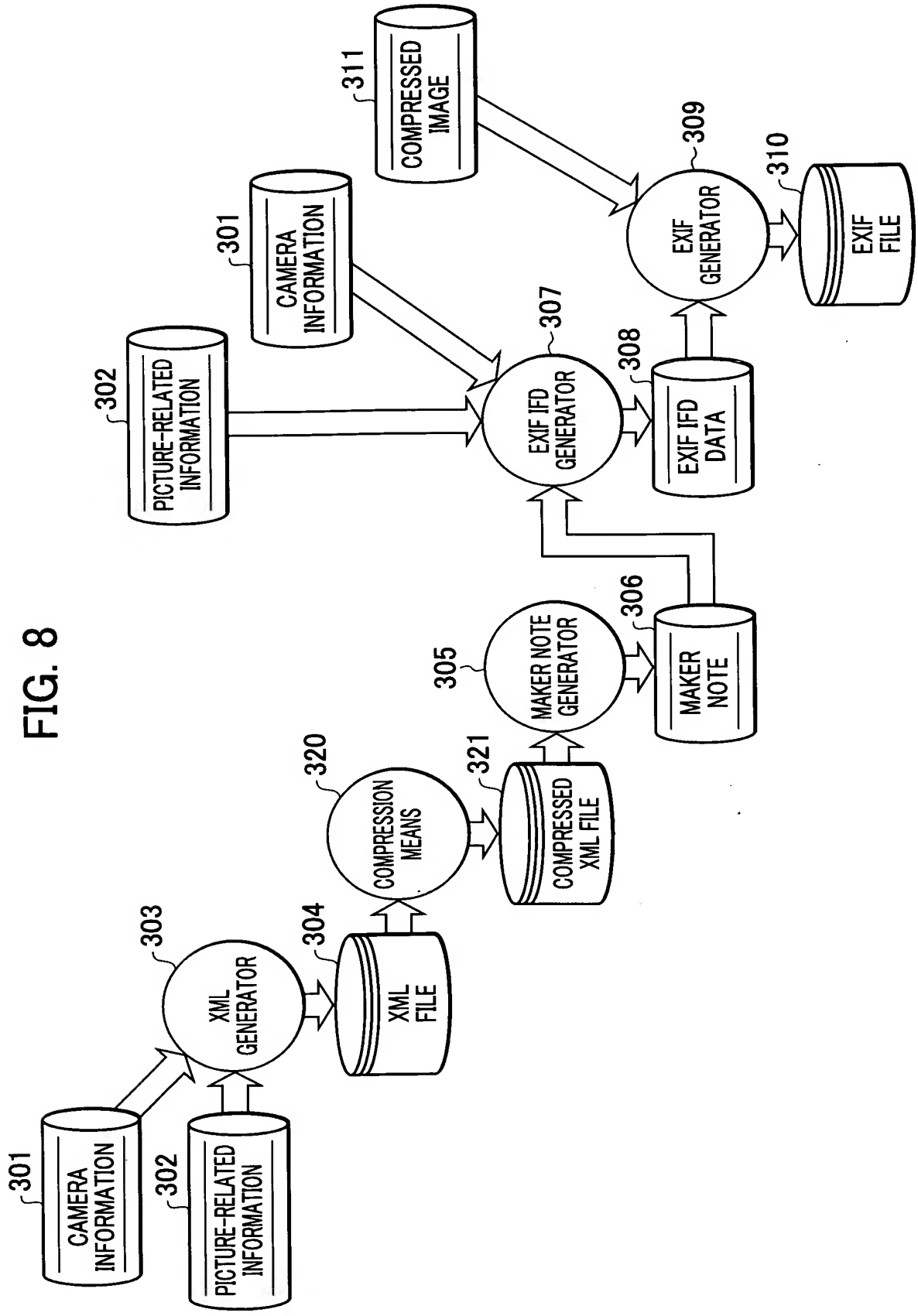

301
CAMERA INFORMATION
302
PICTURE-RELATED INFORMATION
303
XML GENERATOR
304
XML FILE
320
COMPRESSION MEANS
321
COMPRESSED XML FILE
305
MAKER NOTE GENERATOR
306
MAKER NOTE
307
EXIF IFD GENERATOR
308
EXIF IFD DATA
309
EXIF GENERATOR
310
EXIF FILE
311
COMPRESSED IMAGE

FIG. 9

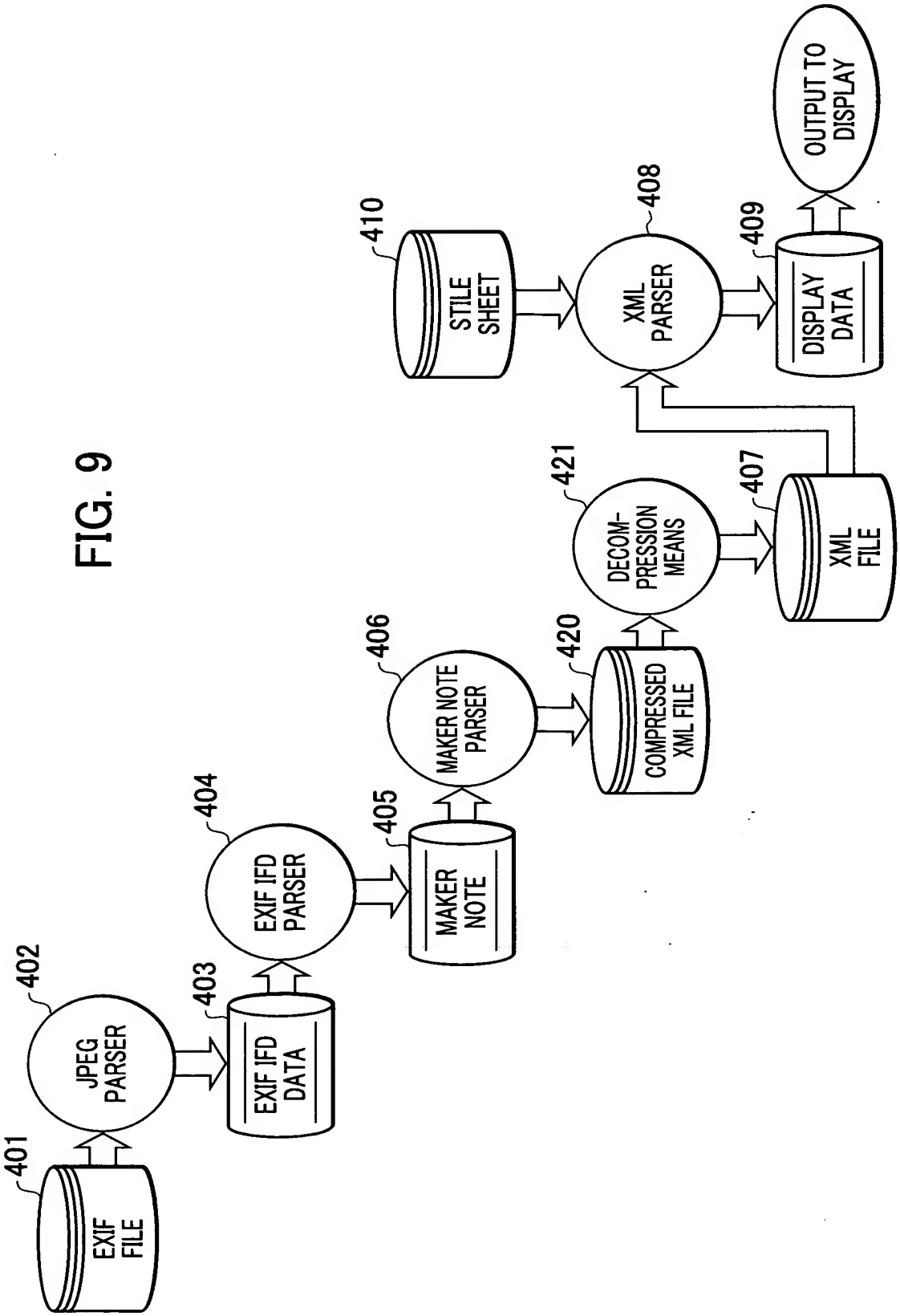

401
EXIF FILE
JPEG PARSER
402
EXIF IFD DATA
403
EXIF IFD PARSER
404
MAKER NOTE
405
MAKER NOTE PARSER
406
COMPRESSED XML FILE
420
DECOM-PRESSION MEANS
421
XML FILE
407
STILE SHEET
410
XML PARSER
408
DISPLAY DATA
409
OUTPUT TO DISPLAY

FIG. 10

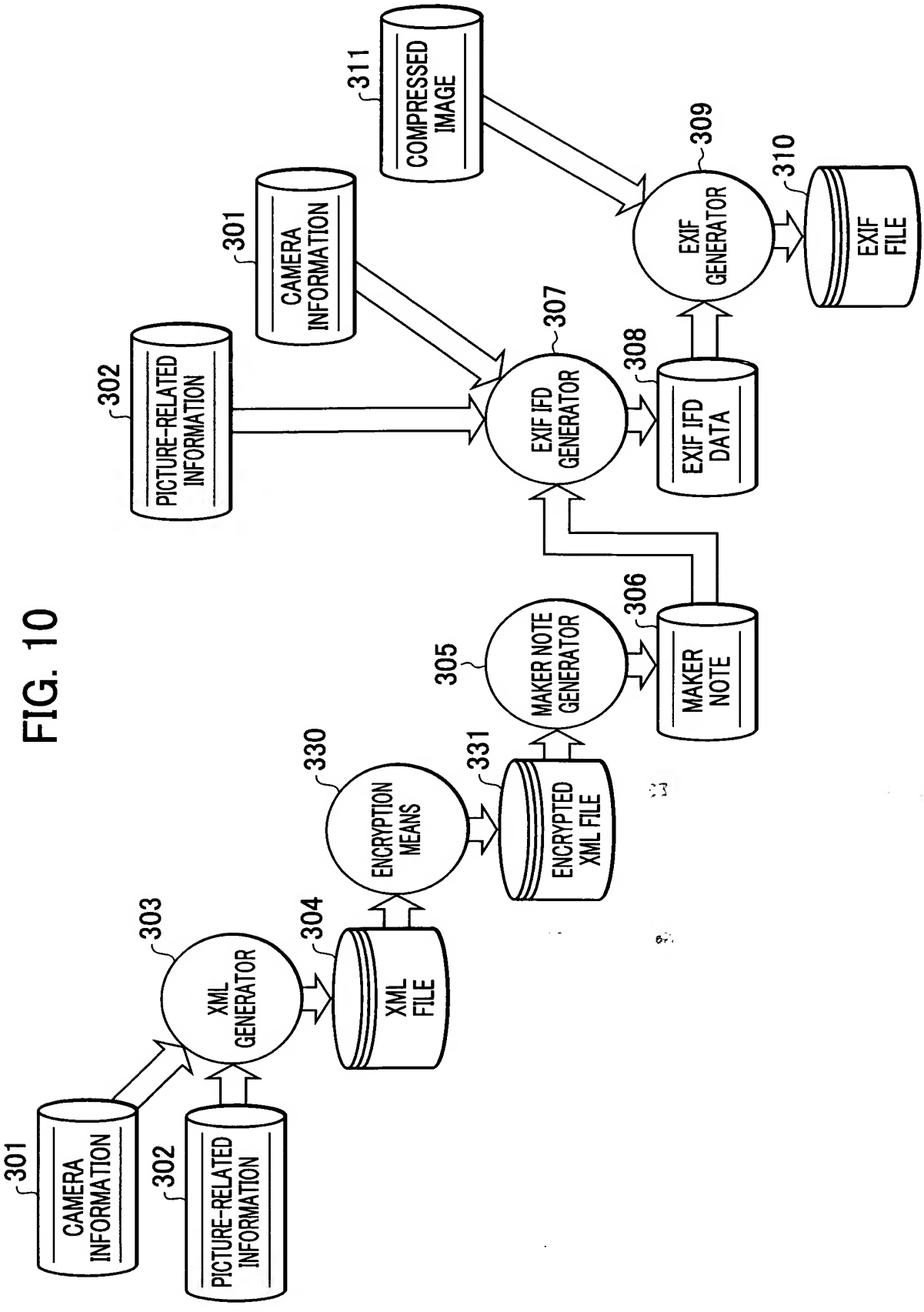

301
CAMERA INFORMATION
302
PICTURE-RELATED INFORMATION
303
XML GENERATOR
304
XML FILE
330
ENCRYPTION MEANS
331
ENCRYPTED XML FILE
305
MAKER NOTE GENERATOR
306
MAKER NOTE
307
EXIF IFD GENERATOR
308
EXIF IFD DATA
311
COMPRESSED IMAGE
309
EXIF GENERATOR
310
EXIF FILE

FIG. 11

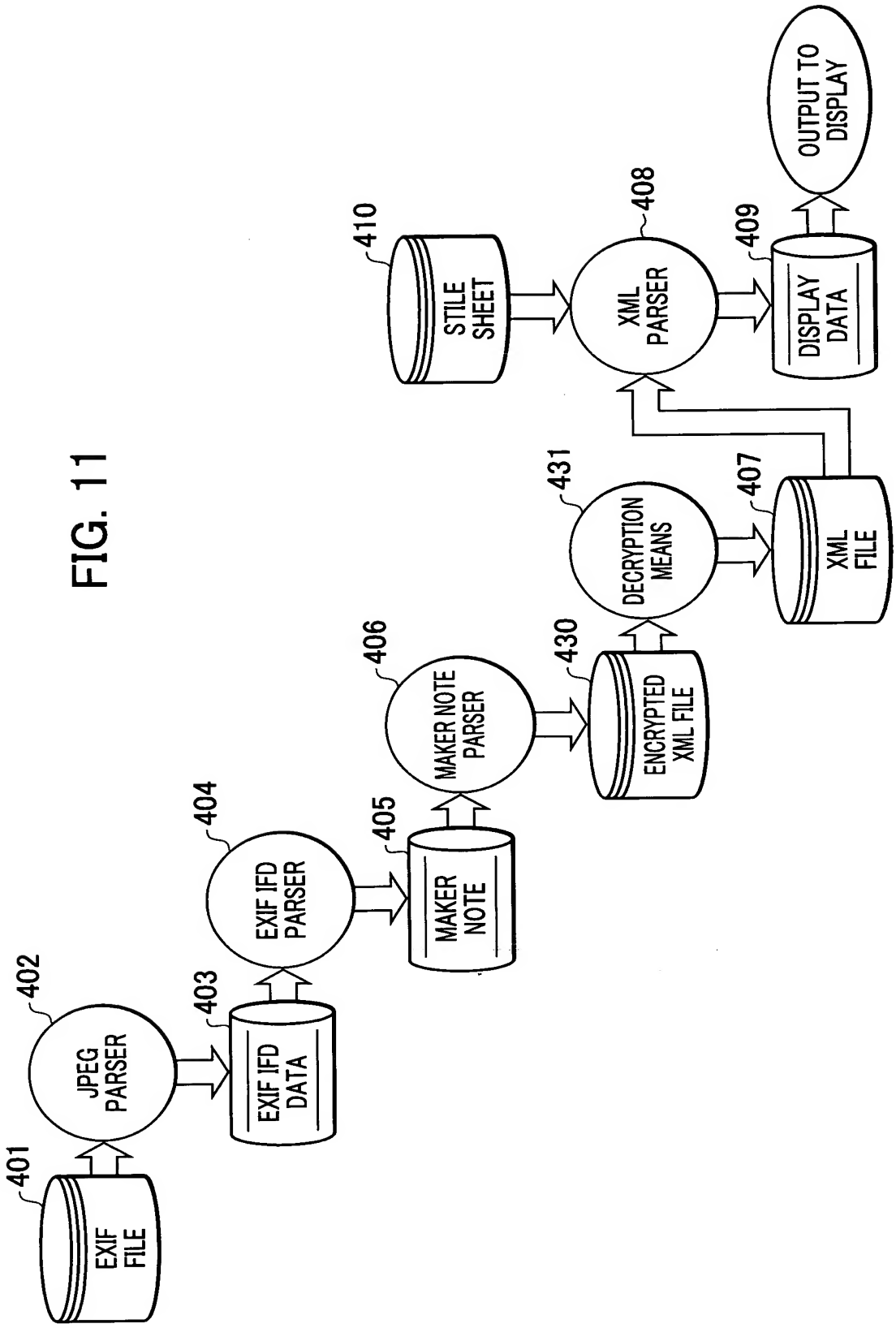

401
EXIF FILE
402
JPEG PARSER
403
EXIF IFD DATA
404
EXIF IFD PARSER
405
MAKER NOTE
406
MAKER NOTE PARSER
430
ENCRYPTED XML FILE
431
DECRYPTION MEANS
407
XML FILE
410
STILE SHEET
408
XML PARSER
409
DISPLAY DATA
OUTPUT TO DISPLAY

FIG. 12

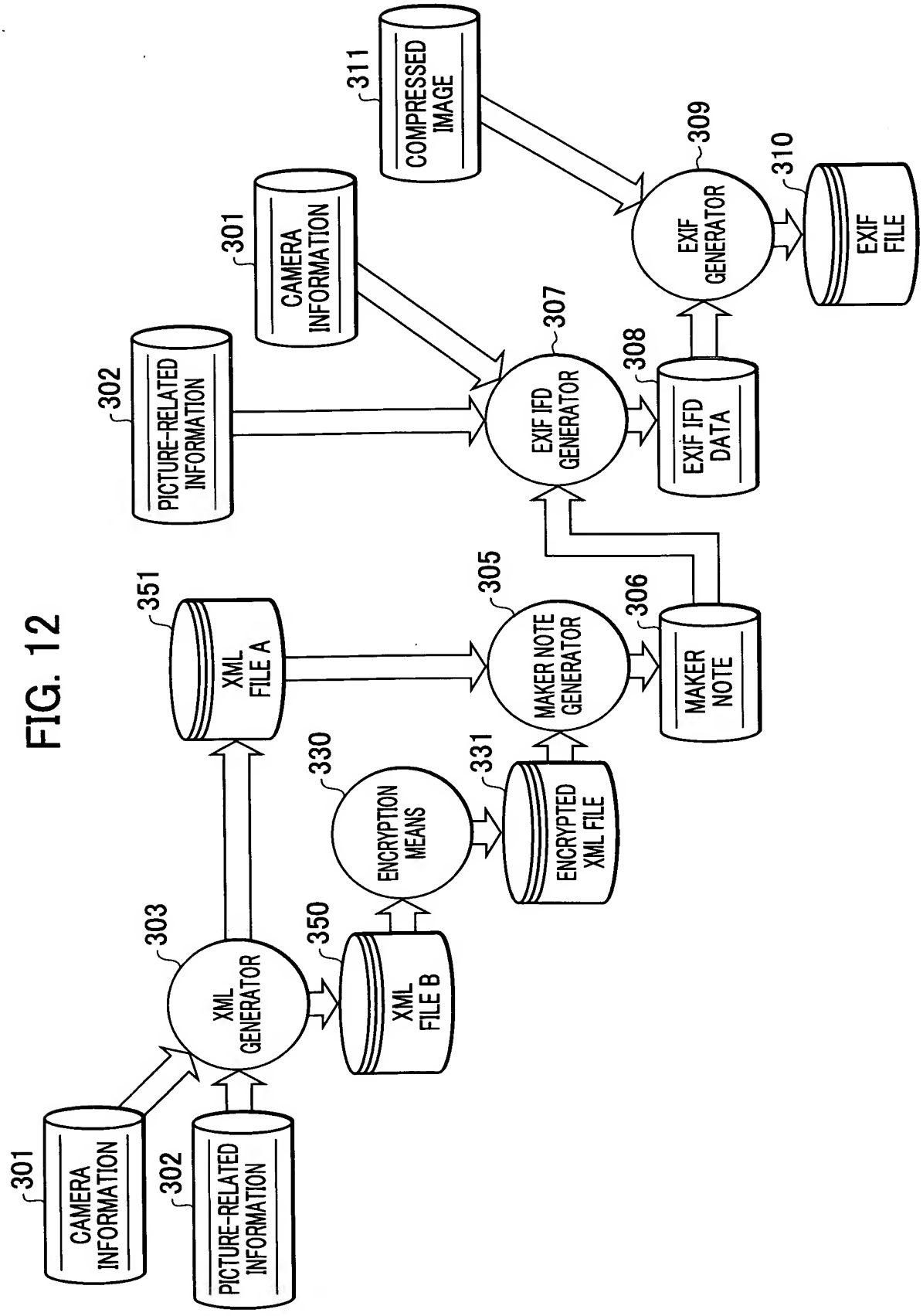
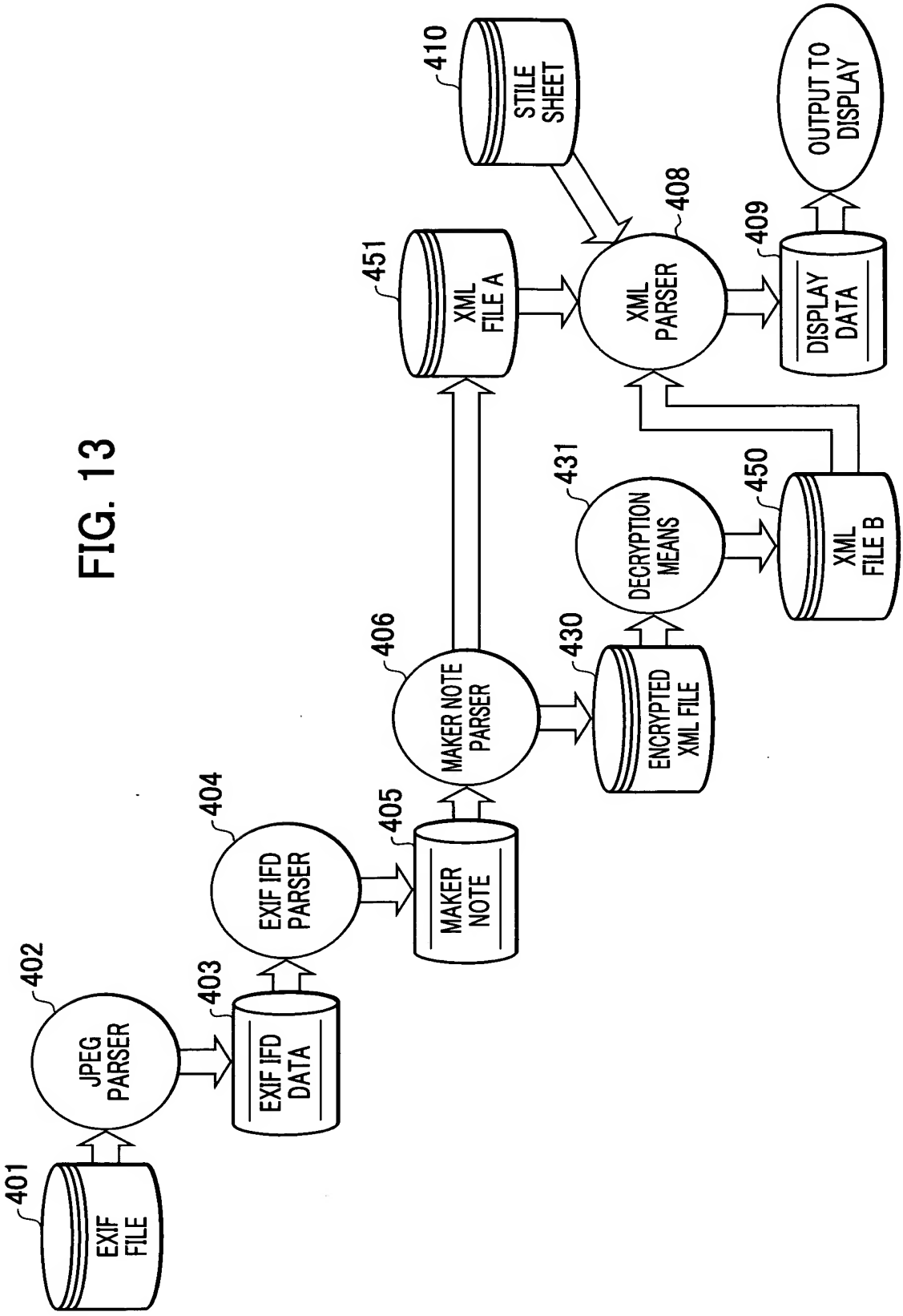

301
CAMERA INFORMATION
302
PICTURE-RELATED INFORMATION
303
XML GENERATOR
350
XML FILE B
330
ENCRYPTION MEANS
331
ENCRYPTED XML FILE
351
XML FILE A
305
MAKER NOTE GENERATOR
306
MAKER NOTE
307
EXIF IFD GENERATOR
308
EXIF IFD DATA
309
EXIF GENERATOR
310
EXIF FILE
311
COMPRESSED IMAGE

FIG. 13


401
EXIF FILE
402
JPEG PARSER
403
EXIF IFD DATA
404
EXIF IFD PARSER
405
MAKER NOTE
406
MAKER NOTE PARSER
410
STILE SHEET
451
XML FILE A
408
XML PARSER
409
DISPLAY DATA
OUTPUT TO DISPLAY
430
ENCRYPTED XML FILE
431
DECRYPTION MEANS
450
XML FILE B